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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,910	09/30/2003	Tsukasa Matsuda	FIS920030385US1 (RAJ-007)	7364

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EXAMINER	
STOUFFER, KELLY M	

ART UNIT	PAPER NUMBER
1792	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Applicant's arguments filed 19 May 2008 have been fully considered but they are not persuasive. The applicant argues that Chung et al. in view of Lai et al. does not teach a metal layer of between 5-60 angstroms deposited during each cycle. However, as was stated in the previous office actions, this variable of layer thickness per cycle is shown to be achieved by routine experimentation by Chung et al., as Chung et al. teaches that during a cyclical deposition process (which in this case includes thermally decomposing the tungsten precursor as taught by Lai et al. for the first layer), the deposition rate of the metal layer varies as a function of the metal precursor (column 10 lines 9-25), showing that it would be obvious to modify this variable by routine experimentation, absent evidence showing criticality commensurate in scope with the claims. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to include the thickness of each metal layer during each cycle as between 5-60 angstroms, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller,* 220 F.2d 454, 105 USPQ 223 (CCPA 1955).

Therefore, for at least these reasons, the rejections from the previous office action are maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY STOUFFER whose telephone number is

(571)272-2668. The examiner can normally be reached on Monday - Thursday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kelly Stouffer
Examiner
Art Unit 1792

kms

/Timothy H Meeks/
Supervisory Patent Examiner, Art Unit 1792